

#### ABSTRACT OF THE DISCLOSURE

5 Geometrical structures of a human image and a background image picked up by a camera are extracted as difference in pixel value distributions, a statistical model of the appearance of the human image is first constructed to find a discrimination axis, the model is compared with an input image, a score is calculated based on the discrimination axis of the model and a distance value vector of the input image, and when the score exceeds a threshold value, it is determined that a human figure is detected. Thus, highly efficient recognition is possible using a small number of models.